
एनटीपीसी
NTPC
50 YEARS
OF POWERING GROWTH
ESG at NTPC
Catalysing Transition towards Integrated and Sustainable Business

NTPC Overview

1

Our Vision, Mission and Core Values

Vision

To be the World's Leading Power Company, Energizing India's Growth

Mission

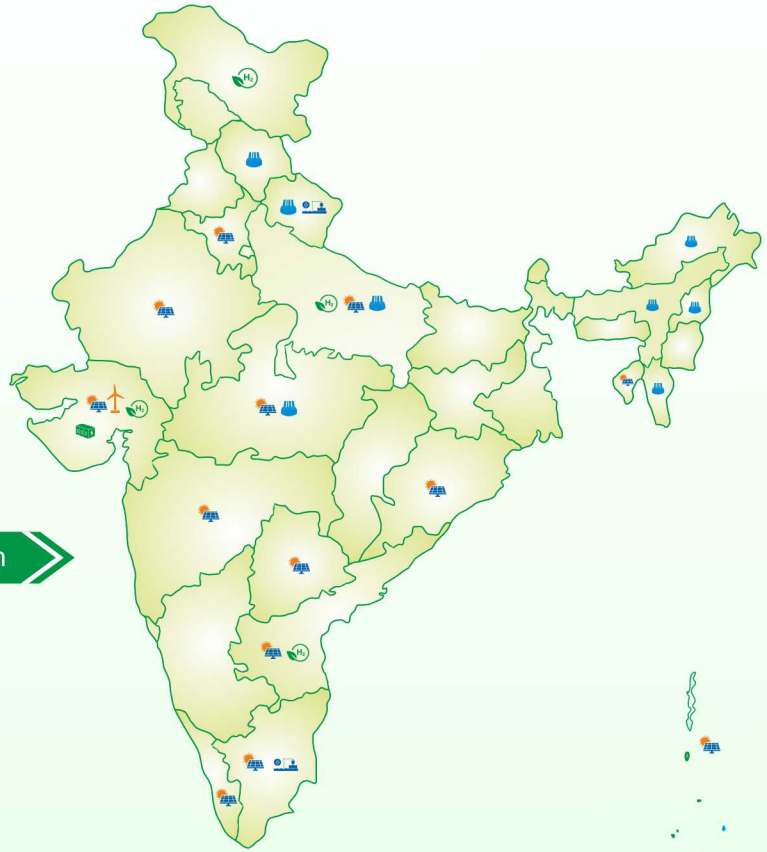
Provide Reliable Power and Related Solutions in an Economical, Efficient and Environment friendly manner, driven by Innovation and Agility

Core Values

Integrity, Customer Focus, Organisational Pride, Mutual Respect & Trust, Innovation & Learning, Total Quality & Safety

Energizing India's Growth with Pan India Presence

Leading the Just Energy Transition



	Coal	Gas	Hydro (Incl Small)	Solar	Wind	Green H_2	BESS	PSP
Commissioned	62.2 GW	6.5 GW	3.8 GW	3.8 GW	0.2 GW	1 kg/day	-	-
Under Construction	11.2 GW	-	1.3 GW	6.8 GW	2.3 GW	340 kg/day	-	1 GW/6 GWh
Under Tendering	13.6 GW	-	12.0 GW	3.7 GW	7.6 GW	200 kg/day	2 GW/12 GWh	3 GW/18 GWh

*Data as on 16.10.2024

Performance Highlights

Group installed capacity of 76,442.8 MW in Oct, FY' 25; generation of 422+ BUs in FY' 24

Generating 24% of India's power with 17% Installed Capacity

Total income crossed ₹ 1.81 Lakh Cr in FY' 24

Added 324 MW of RE commercial capacity in FY' 24

~10 % of generation fleet is carbon free, target to achieve 60 GW of RE by 2032

Implementing "The Brighter Plan 2032" to improve ESG performance

1st Energy company across globe to declare Energy Compacts at UN

Co-founded "Global Alliance for Sustainable Energy" with 16 global energy players

Our ESG-Management System

ESG Policy

Commitment to sustainable development & management of ESG risks and impacts.

Risk & Impact Identification

Identification of potential risks as per IFC performance standard, applicable regulations, and materiality assessment.

Monitoring, Review & Disclosures

- Key indicators, templates and frequency for monitoring and disclosures.
- Monitoring targets as established in The Brighter Plan 2032

Risk & Impact Management Process

- Documented set of practical procedures to operationalize ESG principles.
- Establishing targets and initiatives as per Brighter Plan 2032 strategy document.

Stakeholder Management

Established to collect, analyze and respond to grievances from different stakeholders.

Governance Structure, Roles, Responsibilitiesv

Establishing governance structure and defining roles and responsibilities for ESG-MS implementation.

NTPC ESG-MS Components

ESG: Disclosures

13 years of Sustainability Reporting

- Publishing Sustainability Reports Since FY'12, Now Aligned with GRI Standards 2021
- 5th Integrated Annual Report published in FY'24 as per International Integrated Framework & GRI
- BRSR Comprehensive and Core Reporting aligned with SEBI requirements following NGRBC principles
- Expanded the boundary of reporting with inclusion of all JVs & Subsidiaries since FY'20
- Proactively Instituting measurement and monitoring systems for evolving KPIs around ESG
- Timely responding to DJSI, CDP, Framework and MSCI, Sustainalytics queries to improve NTPC ESG score
- Regular follow-ups and discussions with leading ESG Analysts and rating agencies
- ESG Profile for specific ESG disclosure as per prominent platforms such as SASB, CDP etc.

ESG: Target Settings

The Brighter Plan 2032

Aligned to core business strategy, 26 KPIs of 7 focus areas on Economic, Social and Environmental fronts

ESG: Policies

ESG

Environment

- ESG Policy 2024
- Waste Management Policy 2022
- Water Policy 2022
- Rainwater Harvesting Policy 2018
- Environment Policy
- Integrated Plastic Management Policy 2019
- E-Waste Policy 2014
- Biodiversity Policy 2018
- Ash Policy 2015

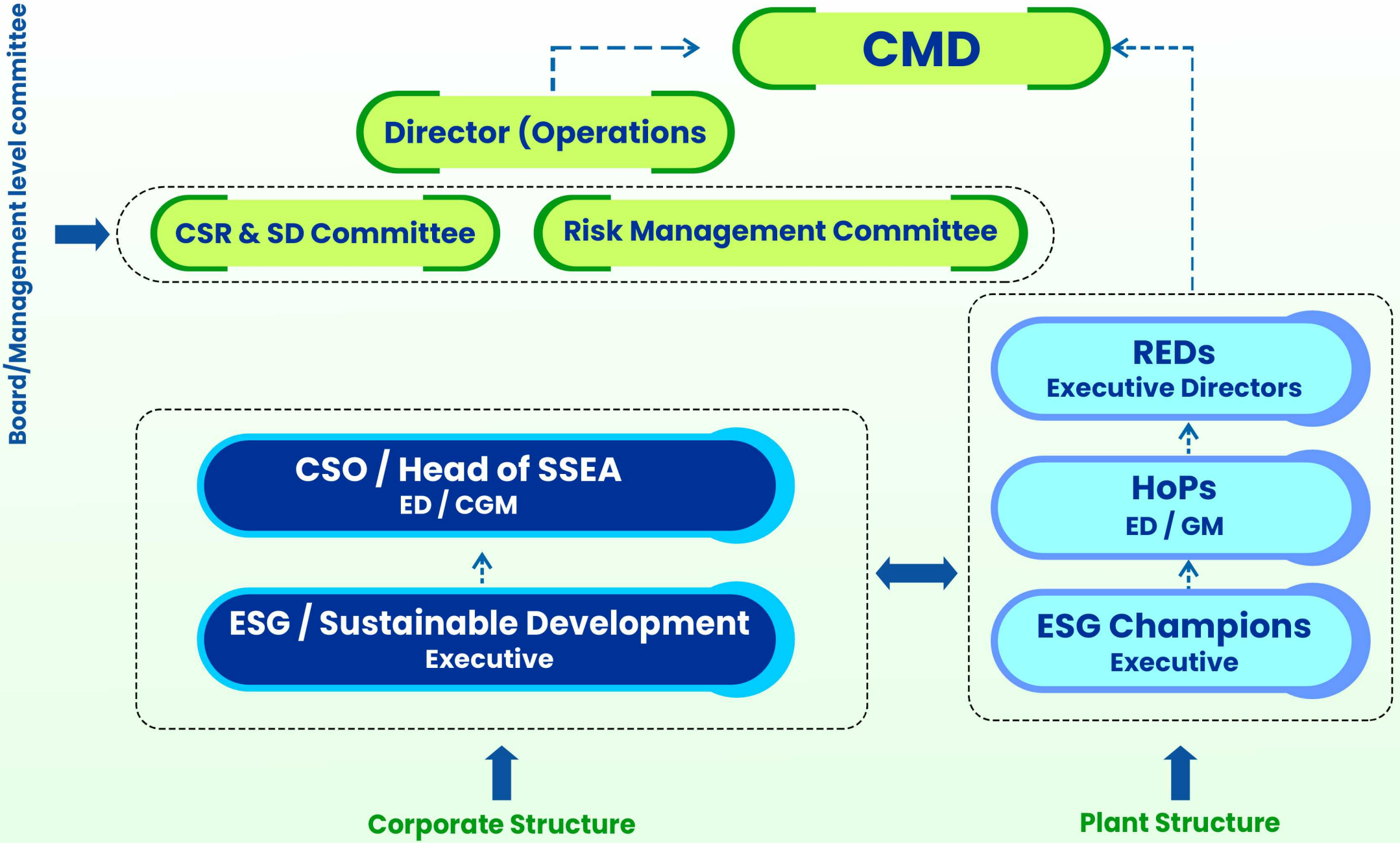
Social

- Human Rights Policy 2019
- Sustainable Supply Chain Policy
- Service Rules 2019
- Safety Policy 2022
- Recruitment Policy 2020
- R&R Policy 2017
- Promotion policy workmen 2014
- Promotion Policy Supervisors 2014
- Promotion policy executives 2021
- Policy on HIV-AIDS at Workplace 2019
- Placement and transfer policy 2021
- Job Rotation Policy 2019
- ICD policy 2009
- Equal Opportunity Policy 2019
- Career Development and succession planning policy 2019
- CSR policy

Governance

- Business Continuity Policy
- Cyber Security Policy
- Whistle Blower Policy
- Training Policy for Directors
- Related Party Transaction Policy 2024
- ABAC Policy 2023
- Fraud Prevention Policy 2007
- Document Preservation Policy
- Complaint Handling Policy
- Code of Conduct for Board Members and Senior Management Personnel
- CDA rules 2023
- Policy for Debarment from Business Dealings

ESG Governance Structure



ESG: Collaborations

NTPC Energy Compacts

- NTPC has become 1st energy company and among few organisations across globe to declare its Energy Compact goals as part of UN High-level Dialogue on Energy (HLDE).
- NTPC energy commitments have been made public on UN's website.
- Major targets are:

  To achieve 60 GW of cumulative capacity of renewables by 2032.

  To reduce group net energy intensity by 10 % vs. 2012 levels by 2032.

Global Alliance for Sustainable Energy

- 17 Global energy players including Enel, Iberdrola
- To foster and promote sustainability along the entire renewable energy value chain
- Create metrics/KPIs/ standards for design, business models, and end of life solutions
- Disseminate and activate funding/ collaboration frameworks
- Policy advocacy
- Launch tailored initiatives and studies around Water usage, Human rights, Net Zero

NTPC Net Zero Plan

- Development of Net Zero GHG emissions Roadmap for NTPC in alignment to GoI's 'Panchamrit' goals
- Emissions and energy (portfolio mix) modelling including development of scenarios for 2030, 2037, 2047 and 2070
- Assistance in establishment of Carbon Management Unit (CMU) in NTPC with the aim of integrating all GHG reduction initiatives under one umbrella

Awards and Recognition

Top positions in FY 2023-24 Asia Executive Rankings

By Institutional Investor

Economic times HR World Future Skills Award FY 2023-24

"Best used of AI/AR/VR in learning and upskilling"

"Best advance in creating an Extended Enterprise Learning Programme"

Vision Awards 2024 by the Indian Chamber of Commerce

for

"Exemplary contributions to Corporate Social Responsibility (CSR) "

CII ITC Sustainability Awards FY 2023-24

NTPC Sipat won with Outstanding Accomplishment title

Asia's Best Employer Brand Award FY 2023-24

At the "ASIA'S BEST EMPLOYER BRAND AWARDS" held on 17th August 2023

Most Preferred Workplace of FY 2023-24

In the third edition of Most preferred work places by Team Marksmen

Forbes 2023 WORLD'S BEST EMPLOYERS

POWERED BY STATISTA

4th Rank among Indian Companies in FORBES* World's Best Employers 2023-24

Awards and Recognition

BRITISH SAFETY COUNCIL Award
for
'37 incident free thermal power stations in FY 2023-24'

IHW Gold Award for CSR Waste Management
for
"Municipal Solid Waste management Project at Varanasi"

Brandon Hall Group HCM Excellence Awards FY 2023-24

- Best Innovative Leadership Program
- Best Results of a Learning Program

SHRM HR Excellence Awards 2023"

Excellence in Developing Leaders of Tomorrow

Excellence in Learning & Development

Excellence in Health and Wellness Initiatives

Excellence in Community Impact

Best Engineered Project MERCOM Award 2023
for
70 MW NTPC Kayamkulam Floating Solar Project

Times Now Sustainable Organization 2024
NTPC honored by ET Edge for the third consecutive year, recognizing its exemplary performance in sustainability within the energy sector

10th Largest Indian company in Forbes Global 2000 ranking - 2023-24

Key Business Drivers

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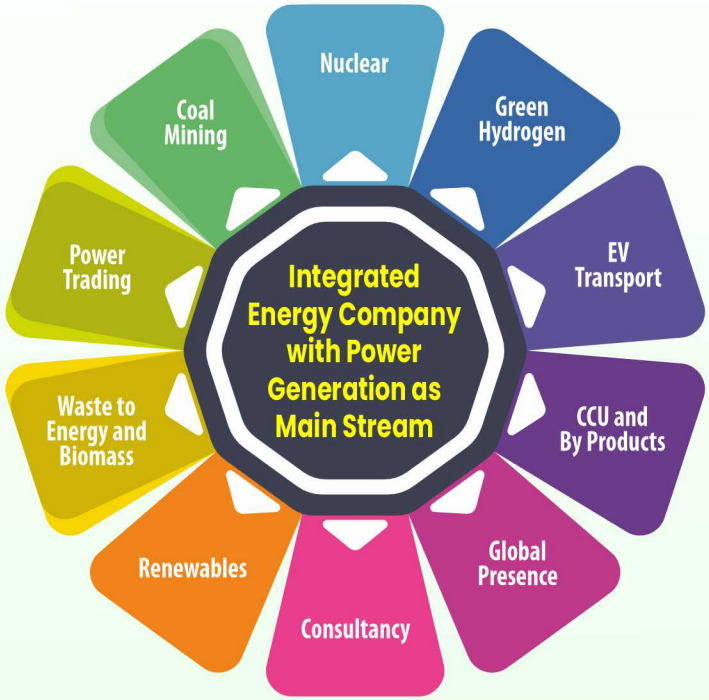
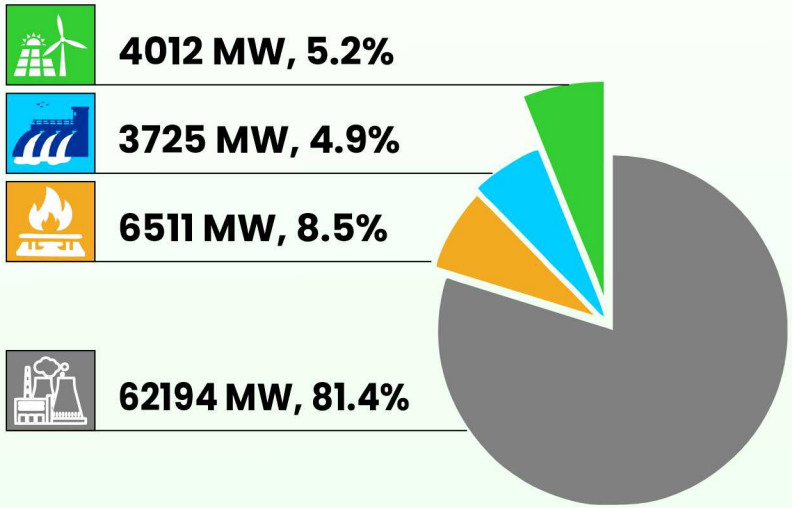
Future Scenario of Capacity Mix

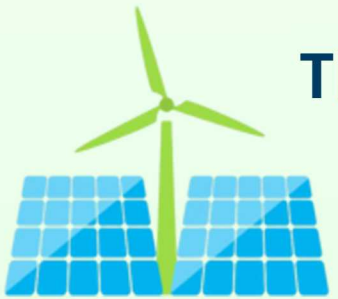
NTPC Energy Spectrum



Total Present Capacity
76.44 GW



Thrust on RE



Present Capacity
4.01 GW

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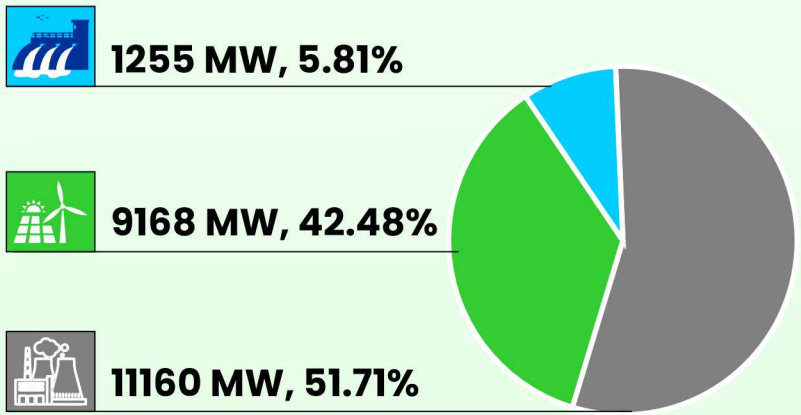
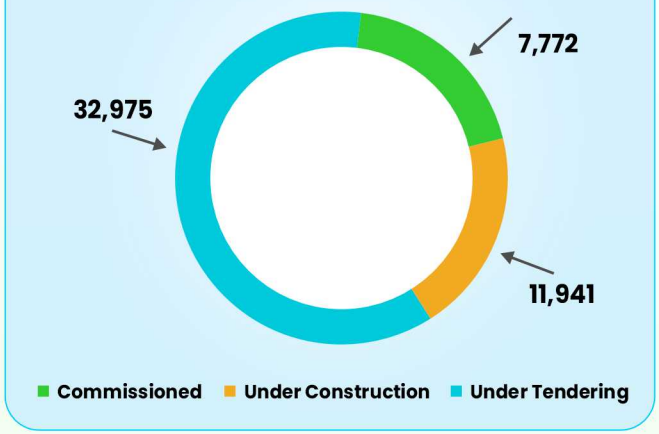
Target Capacity by 2032
60 GW

Capacity Under Construction
21.58 GW

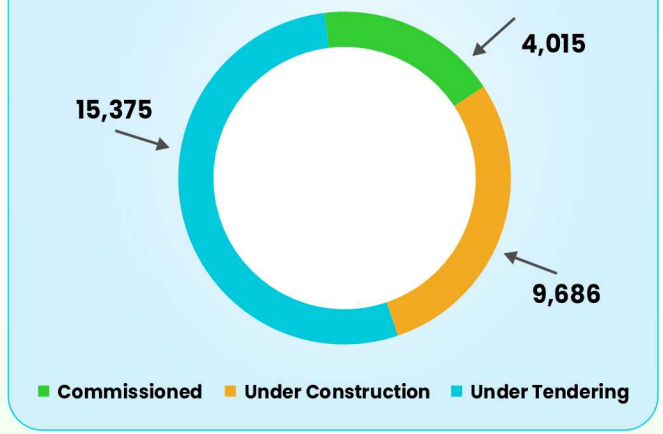


Current Non-Fossil Portfolio of ~ 53 GW*

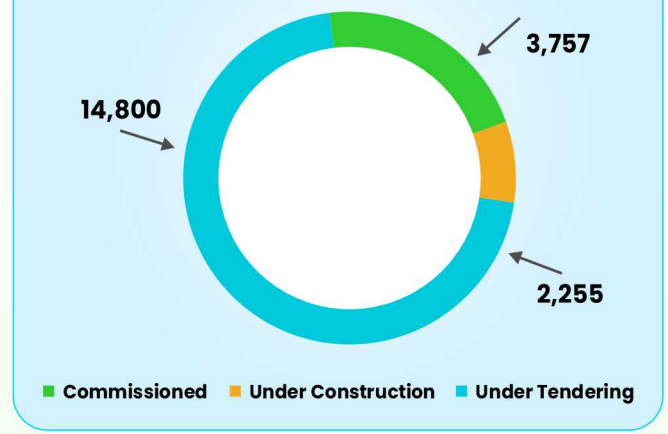
Non- Fossil Portfolio ~ 53 GW



Renewable Energy ~ 29 GW



Hydro Energy ~ 21 GW

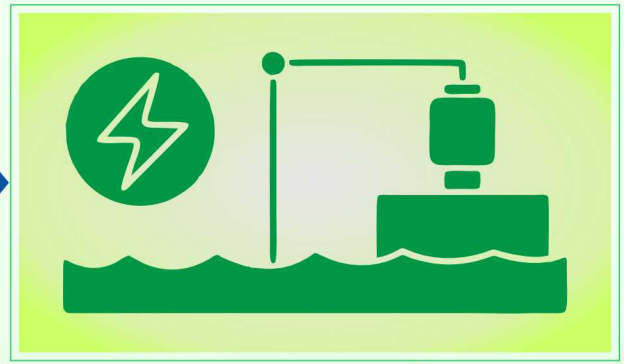


NUCLEAR ENERGY

2.8 GW (Under Tendering)

Battery Storage: 2GW/ 12 Gwh

ESS of 4000 MW/ 24000 MWh under tendering



Pump Storage: 2GW/ 12 Gwh (Excluding pumped hydro)

*Data as on 16.10.2024

Roadmap of 60GW by 2032

40GW Bid Based

TBCB – 25 GW

CPSU Scheme – 5GW.

Flexibilisation – 10 GW

15GW Bilateral/ Merchant

C&I (incl BESS) – 10 GW

Merchant – 5GW.

6GW: Tie up of 1950 MW RE-RTC power with C&I customers

5GW GH_2

Energy storage and mobility

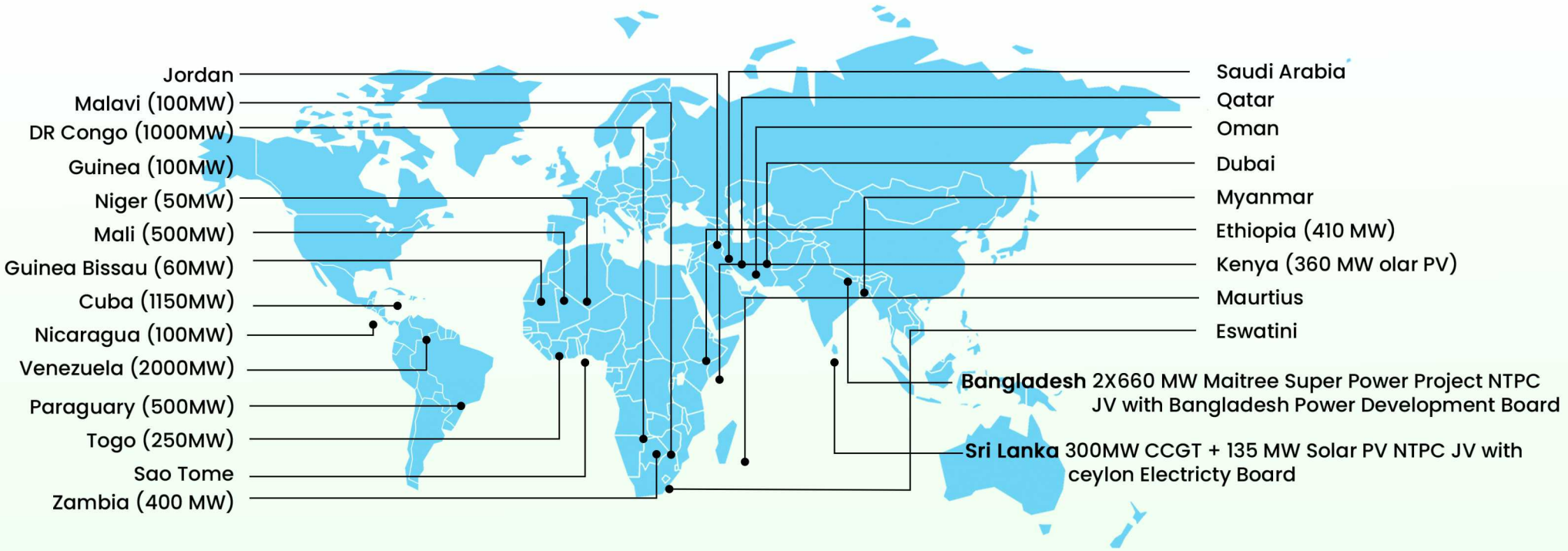
– Green H2 Blending with PNG @ Kawas

Green Methanol / Ammonia

– GACL, NFL Vindhyachal, Khavda, Kutch

- 7.3 GW of U/c UMREPPS
- 42 GW of other proposed UMREPPs

Our Vision, Mission and Core Values



Sri Lanka

Phase I: 50 MW Solar + 40 km transmission line Phase II: 85 MW solar

ISA Assignments

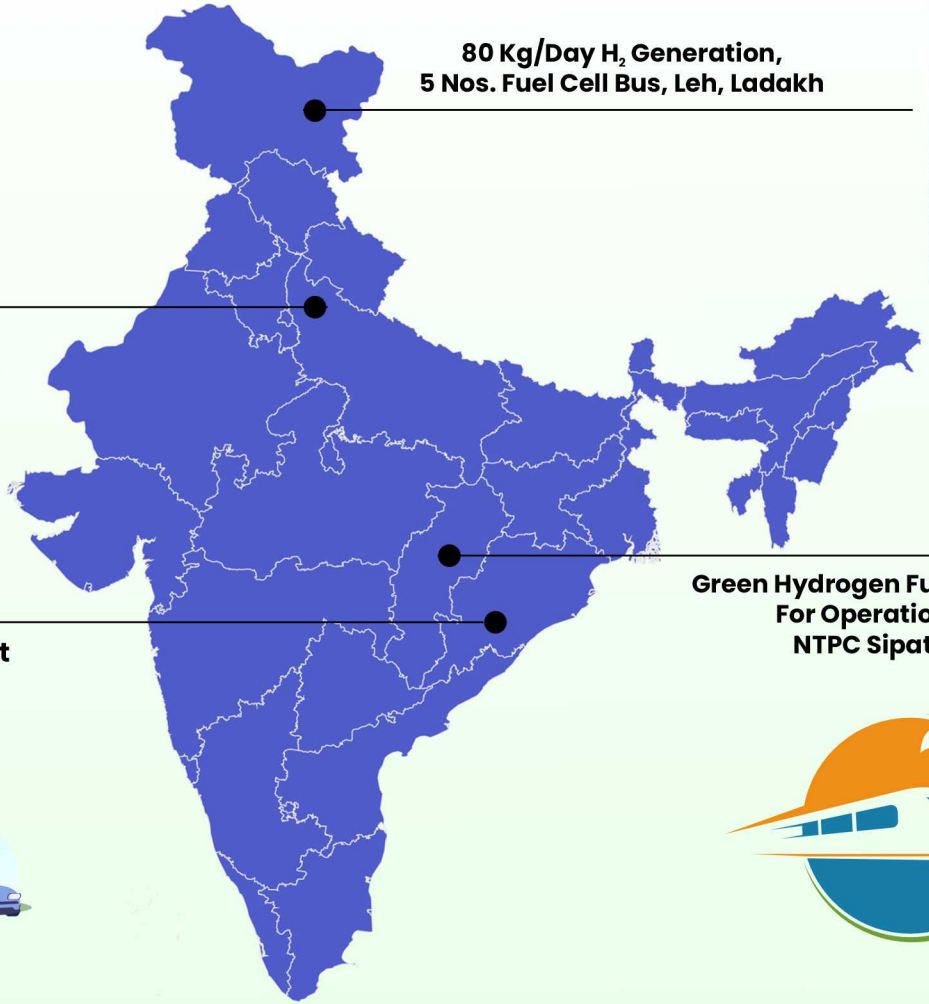
- 6620 MW Solar PMC Latin America: 3750 MW Africa: 2870 MW
- 27 Countries Solarization (ISA grant) DPR prepared for 21 countries and providing PMC services for projects in 11 countries.
- **NTPC is pursuing power sector assignments for O&M services, Engineering & PMC services for Thermal (Coal / Gas) Renewables (Solar / Wind) and Energy Storage solutions in Africa, Middle East, SAARC, ASIAN, CIS, etc. in collaboration with other partners.**
- **Assignments secured in Mauritius, Eswatini, Jordan, Togo, Ethiopia, Sao Tome, etc. Capacity building for Myanmar officials.**

Major Clean Energy Initiatives

Green Hydrogen Mobility

260 Kg/Day H_2 Generation
for 5 Nos. Fuel Cell Bus, Greater Noida

80 Kg/Day H_2 Generation,
5 Nos. Fuel Cell Bus, Leh, Ladakh



Green Hydrogen Fuel Cell Locomotive (S)
For Operation at The MGR of
NTPC Sipat Chhattisgarh

260 Kg/Day H_2 Generation at
Bhubaneswar, Odisha

Green Energy
1.70 MW
7.68 Acres

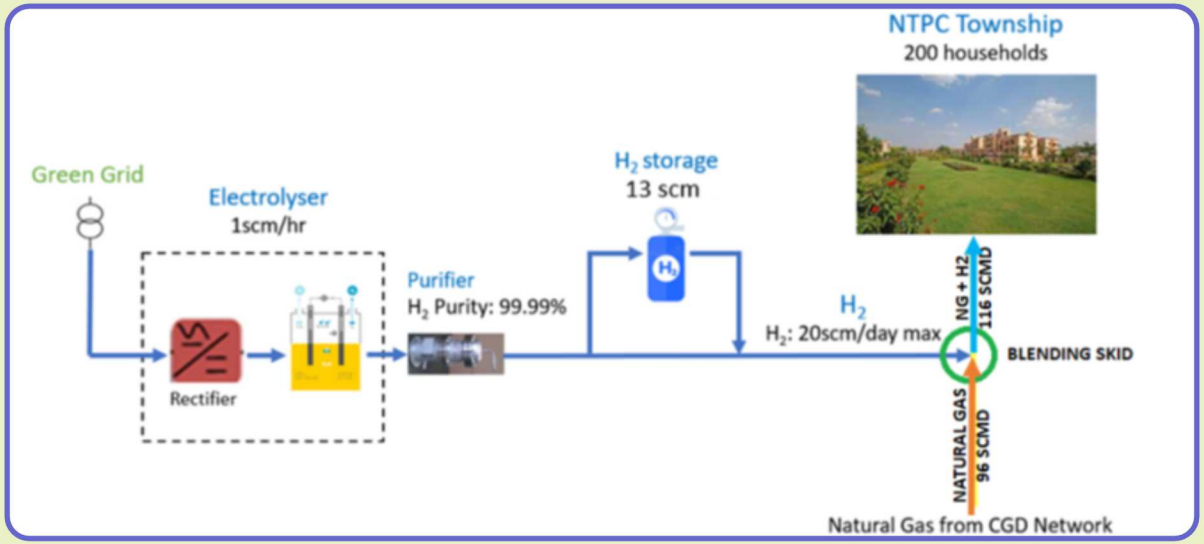
H2 Generation
80 kg/day
9 hrs opr.

Storage
500 bar

H2 Dispensing
350 bar

FCEV Fleet
9m Buses

GH_2 Blending with Natural Gas

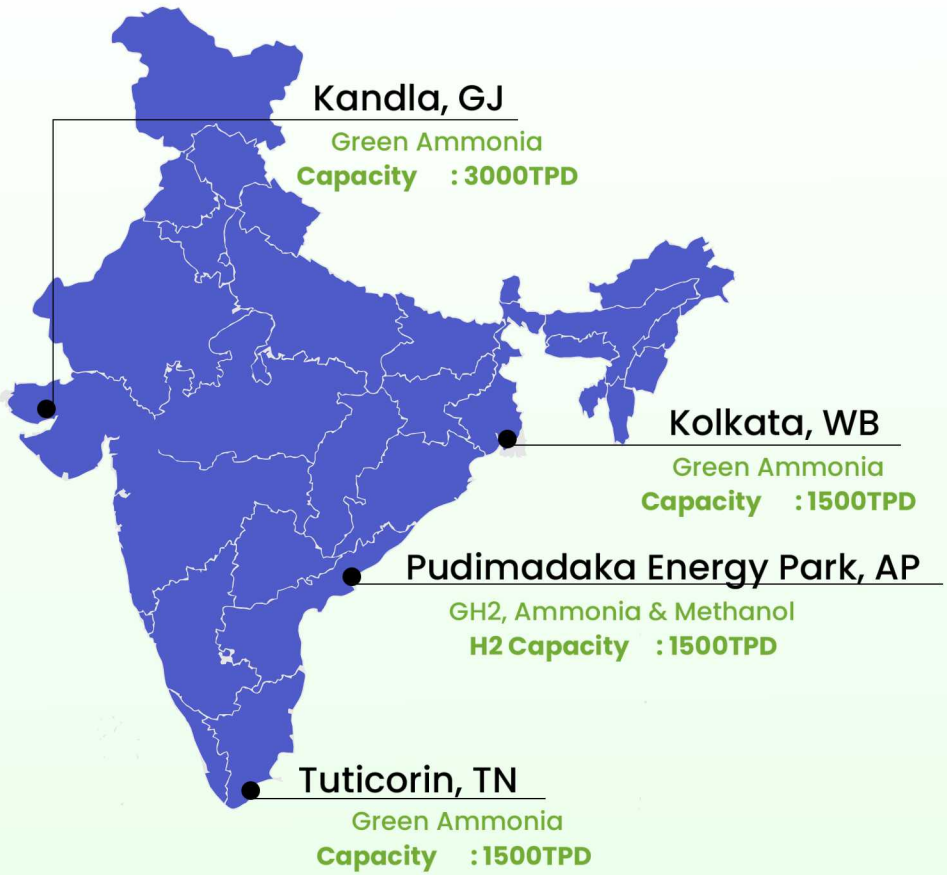


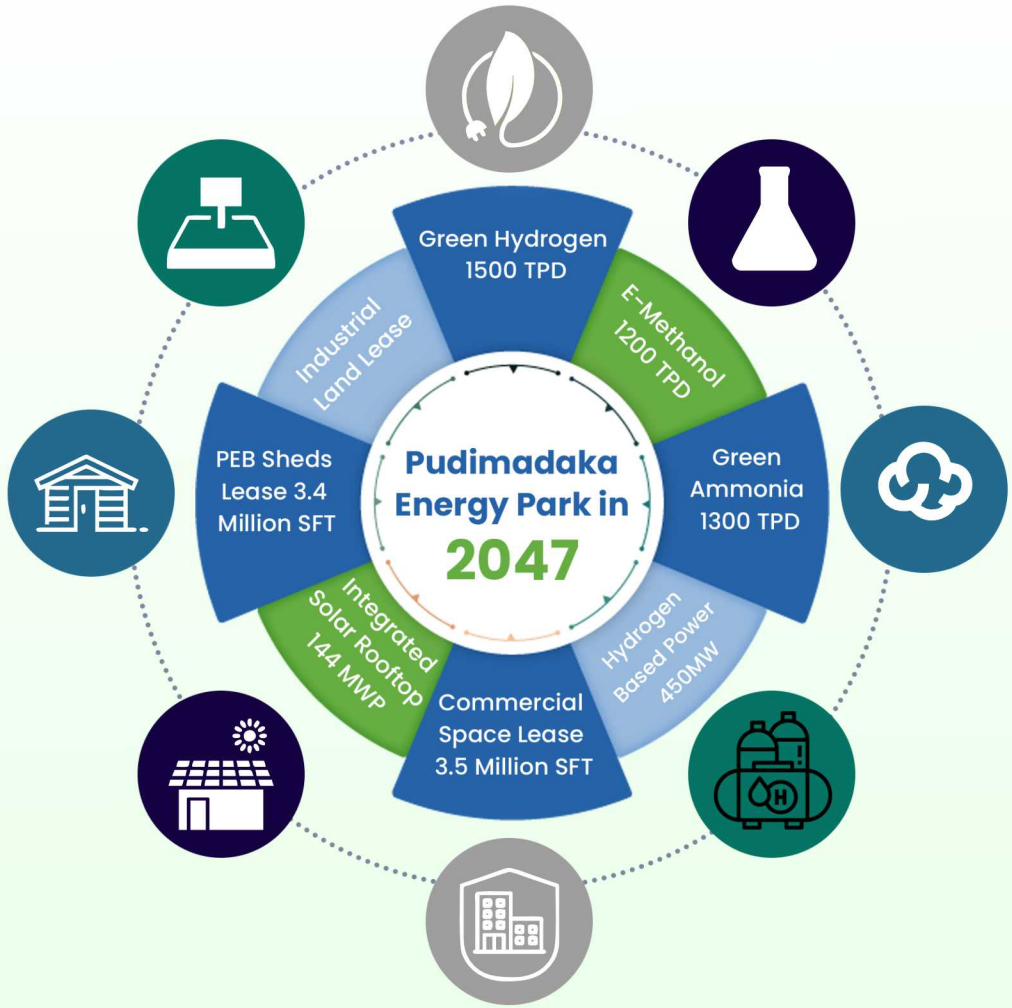
- First Phase commissioned on Jan 2023 for 200 Households with blending of 5% v/v.
- Received Approval for 8% v/v and planning for further expansion by 20%.
- Green power is supplied for making Green H_2.

India's First Green Hydrogen Blending with Natural Gas

Location – NTPC Township, Kawas, Gujarat, India

Green Chemical Initiatives (Ammonia & Methanol)





Electrolyser:

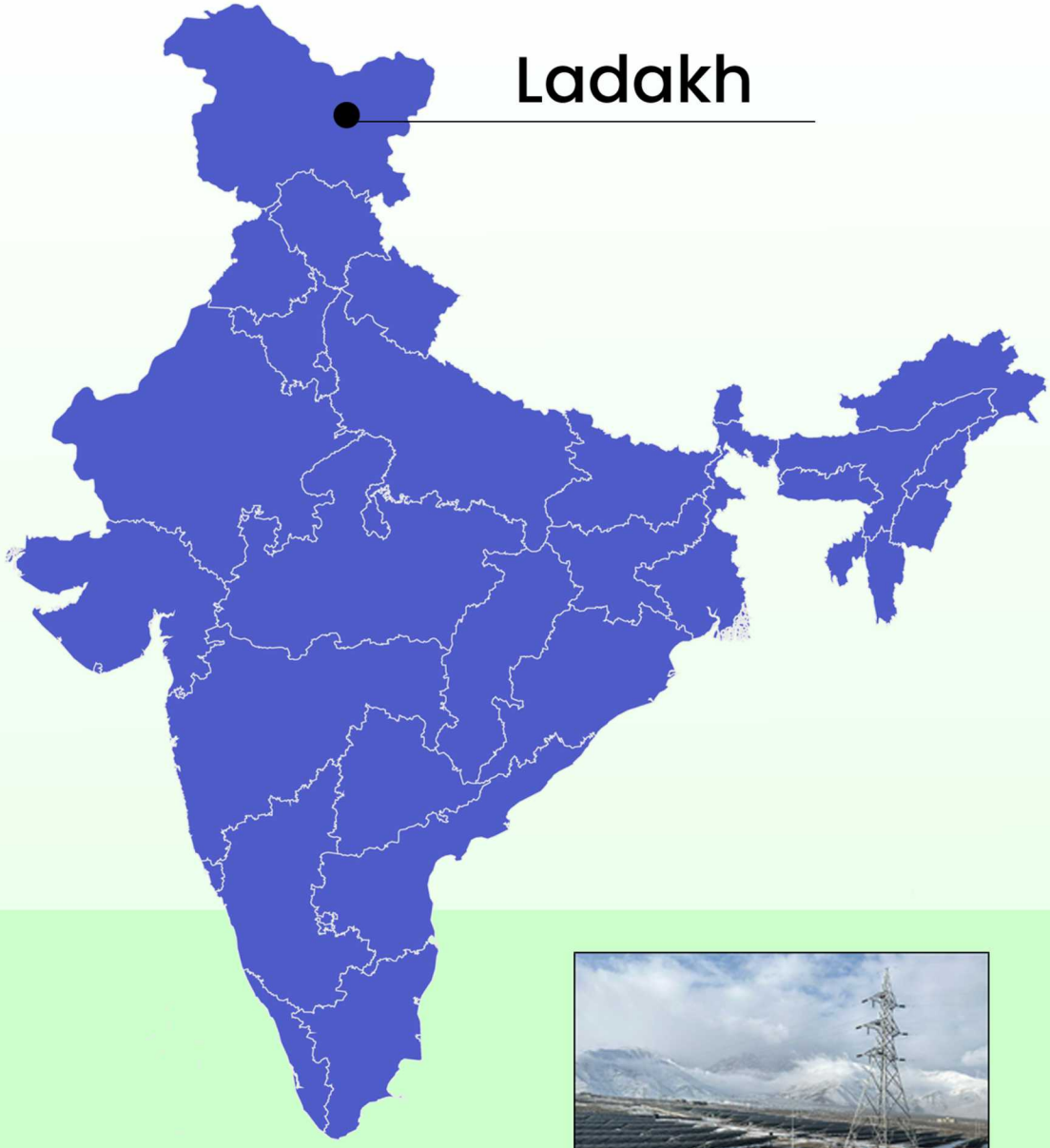
NTPC tie up with Electrolyser manufacturer for supply of

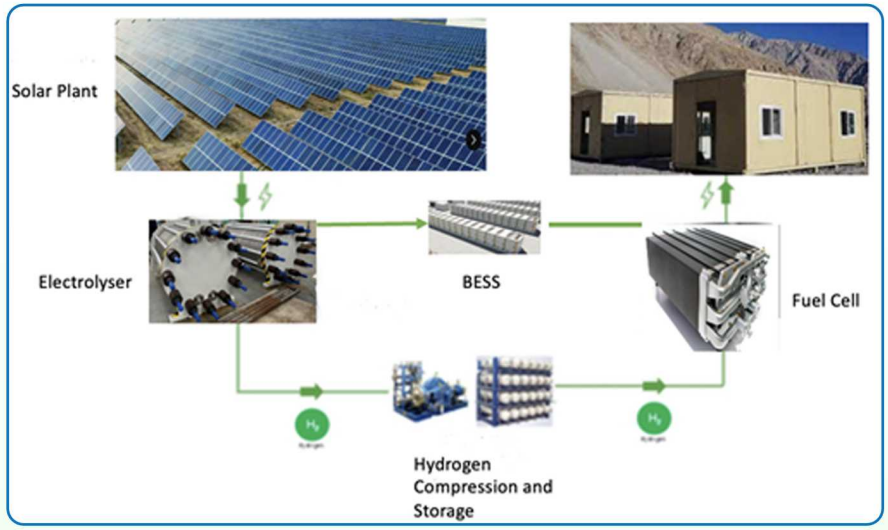
- 600MW Alkaline
- 400MW PEM

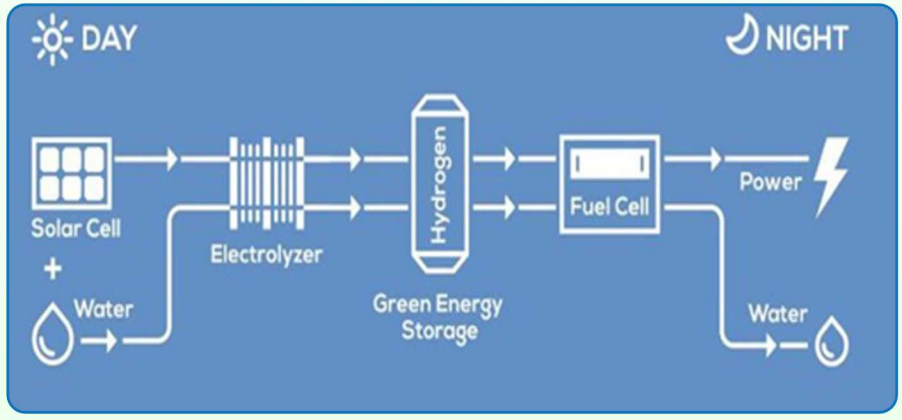
Green Chemical: Ammonia and Methanol

- NTPC Signed a MoU for Development of Green Hydrogen Hub in Ports
- DPR and feasibility Studies are in progress

200kW GH2 based Microgrid at Chushul, Laddakh

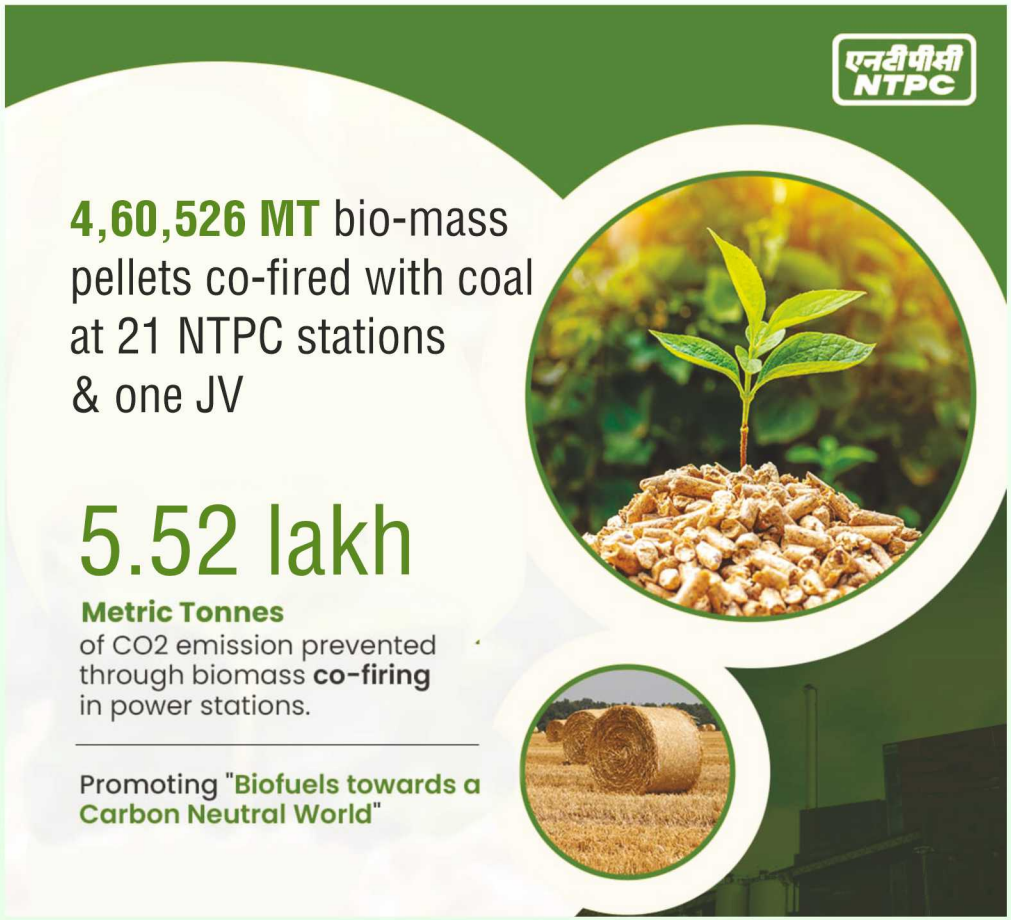






Biomass Co-firing : Carbon Neutral Fuel

A sustainable environment-friendly initiative for generating electricity.

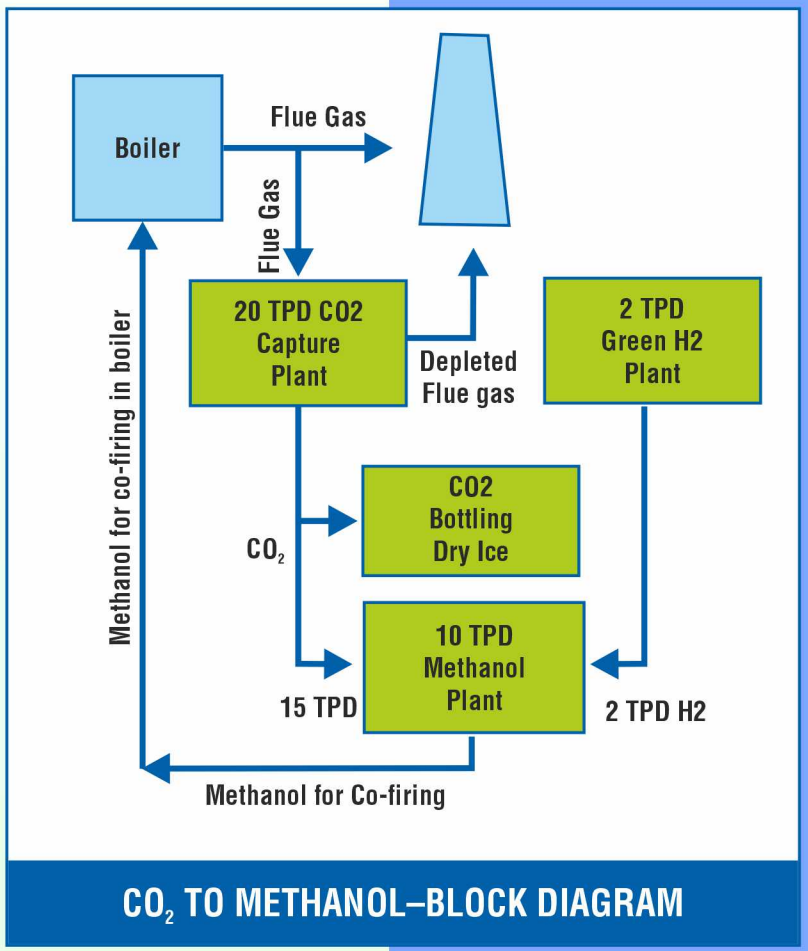


❒ NTPC Biomass pellet plant

- 22 TPD Non-Torrefied pellet plant is under erection at Lehra Mohabbat, Bhatinda.
- 100 TPD Torrefied pellet plant under erection at APCPL Jhajjar.
- 50 & 100 TPD Non-Torrefied pellet plant under erection at Dadri & APCPL Jhajjar (respectively).
- NTPC is planning to set up 05 Pellets plant each at Punjab and Haryana.

Green Methanol Pilot

- The Carbon Capture Unit of 20 TPD Capacity has been commissioned at NTPC Vindhyachal.
- Captured CO_2 will be converted in to Methanol using Green Hydrogen.
- CO_2 Capture Technology for "Greening the Coal Power Generation" commitment towards Net Zero by 2070.

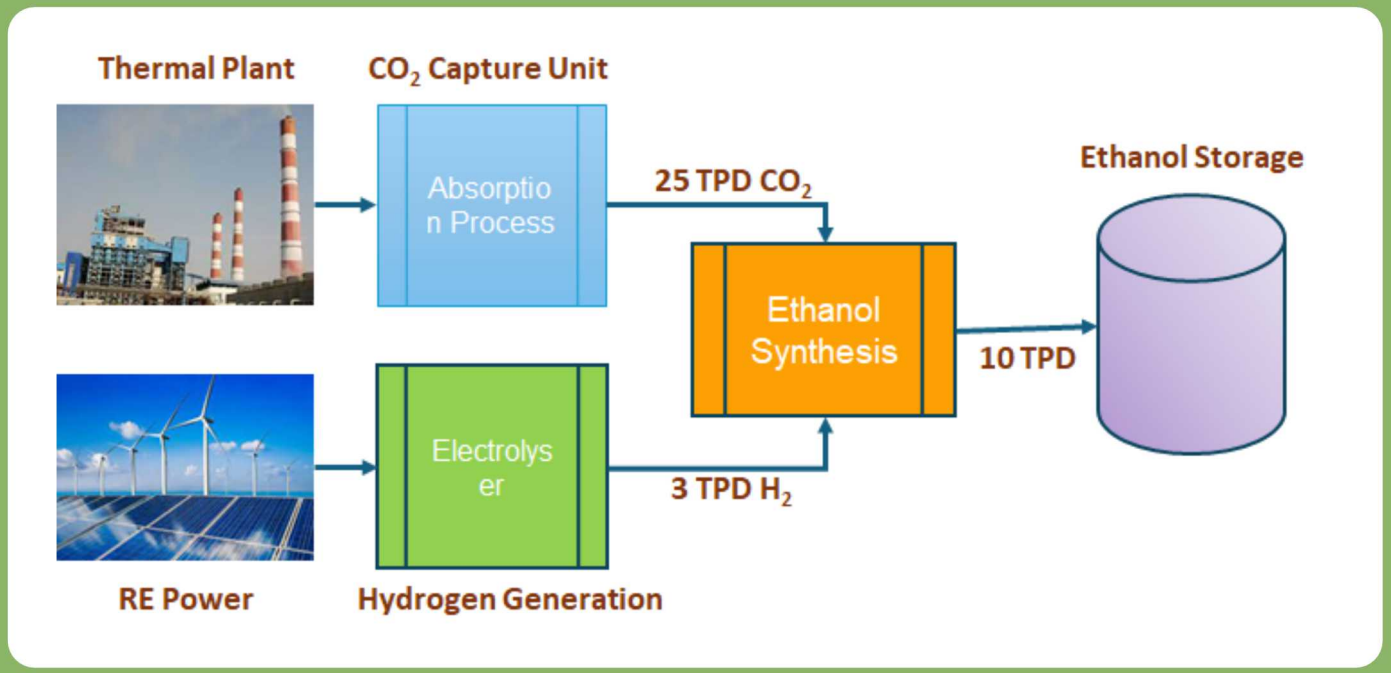


CO_2 TO METHANOL–BLOCK DIAGRAM

Green Ethanol Pilot

Ethanol: 10 TPD Flue Gas – CO_2 to Ethanol Plant

- **CARBON CAPTURE UNIT**
  - 25 TPD CO_2 from thermal plant flue gas
  - Energy efficient amine absorption process
- **HYDROGEN GENERATION UNIT**
  - Generating 3 TPD Hydrogen
- **ETHANOL SYNTHESIS BLOCK**
  - Conversion of CO_2 to Ethanol
  - Catalytic hydrogenation process



Location:
NTPC Lara, Chhattisgarh

Waste to Value

Waste to Energy Projects

- 24 TPD/ 200 kW thermal gasification based Waste to Energy (WtE) plant to Varanasi
- MoU signed with IOCL for pilot WtE project (50 TPD) through Plasma Enhanced Gasification technology. Front end engineering and design (FEED) is in progress.

Waste to Compost

- NTPC revamped and managing O&M of Waste to Compost plant at Varanasi having 600 TPD Capacity. It generates 60-80 TPD of compost.

Waste to Charcoal Projects

- Dadri Pilot project for MSW to charcoal plant already commissioned.
- Varanasi Harit Koyala Pariyojana has been commissioned with 600 TPD MSW capacity. It is based on Torrefaction Technology
- Other MSW to Charcoal Plants are under planning & implementation at Gorakhpur (500 TPD), Hubli-Dharwad (200 TPD), Indore (500 TPD) and Bhopal (400 TPD) Faridabad (1000 TPD), Haryana (1500 TPD), Meerut (800 TPD).

GHG Mitigation

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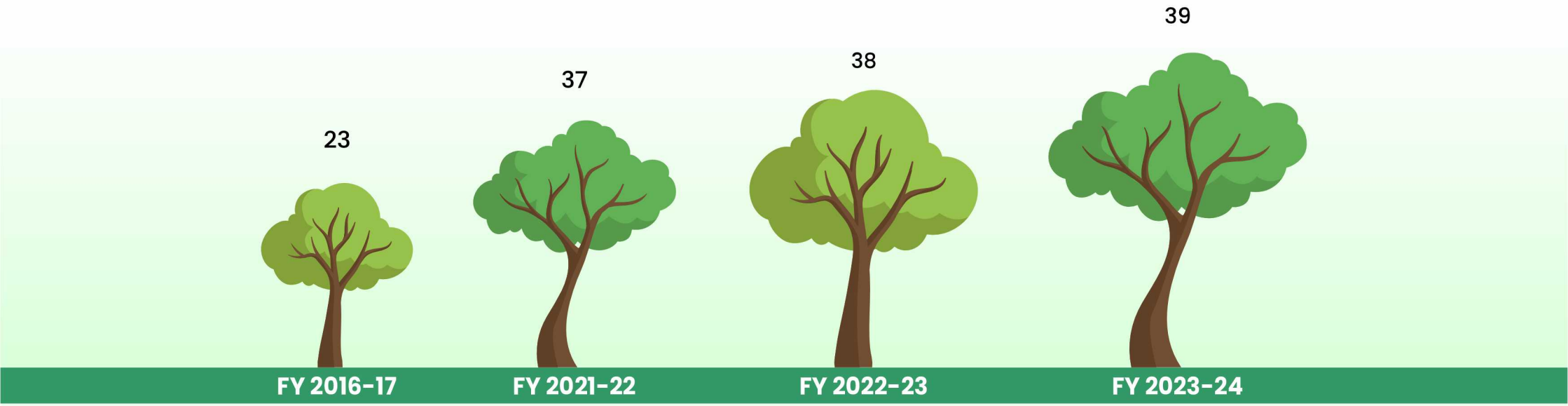
Creating Carbon Sinks through massive afforestation Programme

Tree Plantation (Millions)



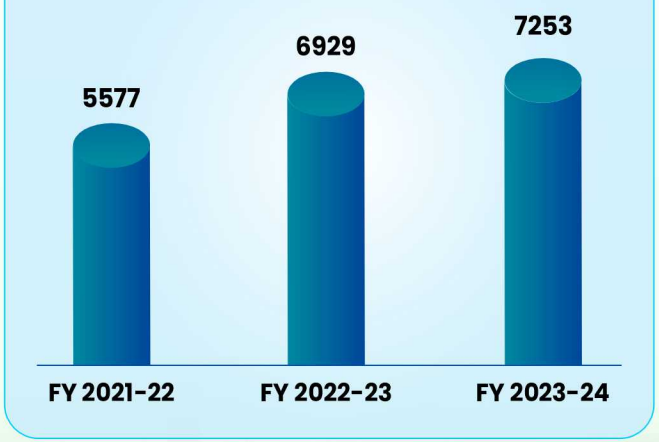
- Supporting country's NDC of creating an additional carbon sink of 2.5 to 3 billion tonnes of CO_2 equivalent through forest and tree cover by 2030.
- Have planted 10 million trees across the country during 2016-17 and continuing to create additional sink by planting 10 millions in next ten years i.e. till FY 2026-27.
- More than 39 Million saplings planted till 2023-24 since inception (NTPC/Govt. Lands)

Tree Planted (Mn)
39

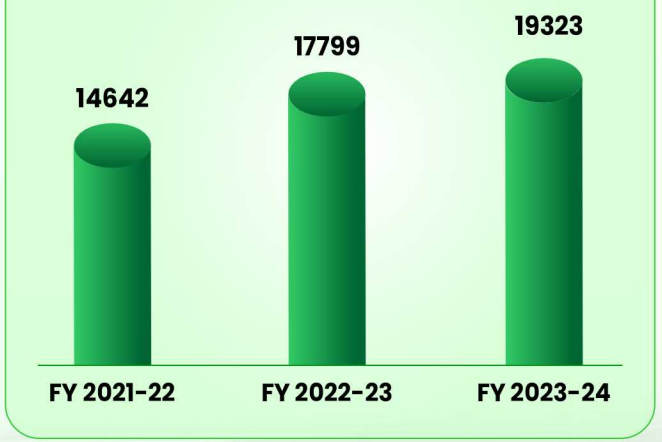
CO2 Seq. (Mn Tonnes)
0.78

Avoiding GHG emissions through Non-Fossil Generation

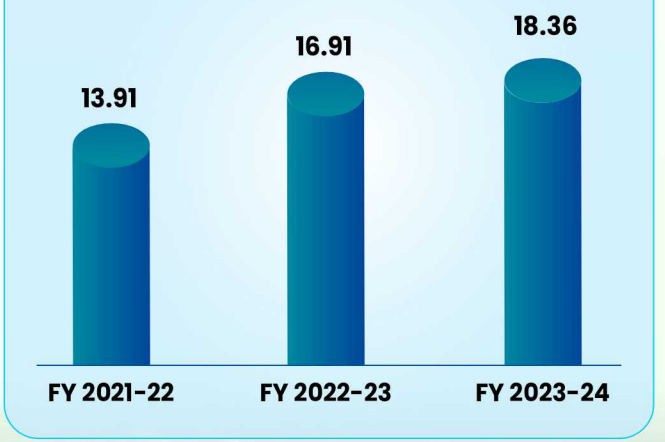
Installed Renewable capacity (MW)



Renewable Power Generation (Mn Units)

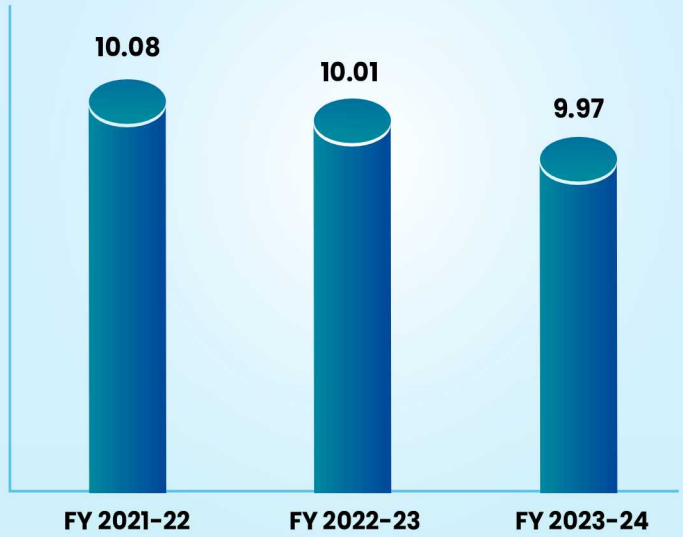


Avoided GHG emissions (Mn Tonnes)



Technology Upgradation & Efficiency Improvement

Net Energy Intensity (MJ/kWheq)

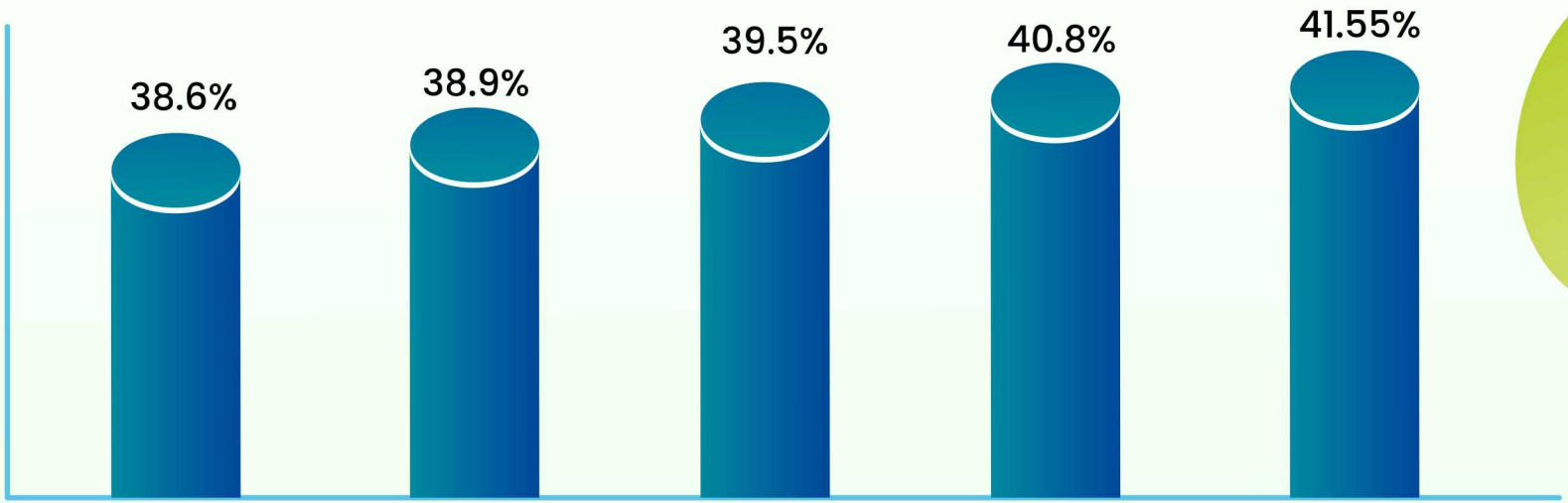


- In FY 2023-24, the NTPC group reduced its Net Energy Intensity to 9.97 MJ/kWh from 10.01 MJ/kWh in FY 2022-23.
- This signifies enhanced operational and energy efficiency and reduced dependence on fossil fuels.

- Adoption of HELE (High Efficiency Low Emissions) Technologies—Supercritical, Ultra Supercritical, and Advanced Ultra Supercritical.
- 35 units of supercritical and ultra-supercritical technologies, constituting total capacity of 24,640 MW

Reducing GHG Emissions with Efficiency Improvement

Gross Efficiency Higher Heating Value HHV%



Every 1% increase in efficiency yields 2.5% CO_2 reduction

Unit Type	500 MW Sub-C Mod.	500 MW Sub-C 565RH	SC	SC	USC
Pressure (Ksc)	170	170	247	247	270
Temp (°C)	540/540	540/565	573/565	565/593	600/600
CO_2 *reduction MMTPA	Base Unit	0.04	0.13	0.33	0.44
%		(0.8%)	(2.3%)	(5.7%)	(7.6%)

Constant endeavor to reduce CO_2 emissions- steps to increase cycle efficiency

*Per 10000 MW installed capacity

Environment Performance

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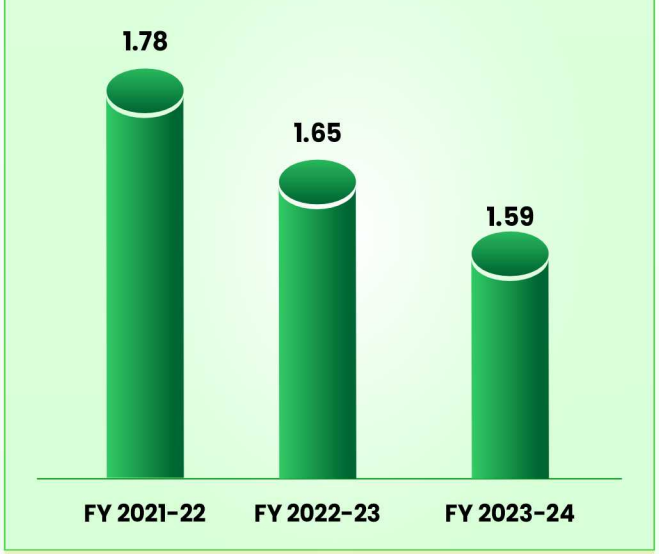
Reducing Non-GHG Emissions

Specific SOx, NOx, PM Emissions

SO_x emission g/kWh

NO_x emission g/kWh



Particular Matter g/kWh

SO_x Reduction :

- FGD including DSI Commissioned in 6760 MW
- Gas in achieved in 5710 MW
- FGD under various stage of Erection and Commissioning in 58+ GW capacity.

NO_x Reduction :

- Modification completed in –20.81 GW /21.56 MW

SPM Reduction :

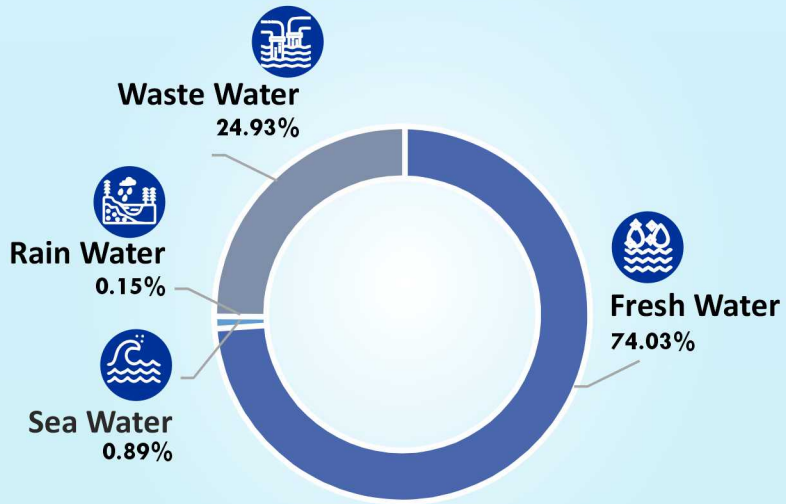
- ESP R&M completed in 13010/15960 MW
- Additional reduction being achieved through FGD installations

Efforts towards Alternate Water Use

OUR STRATEGY

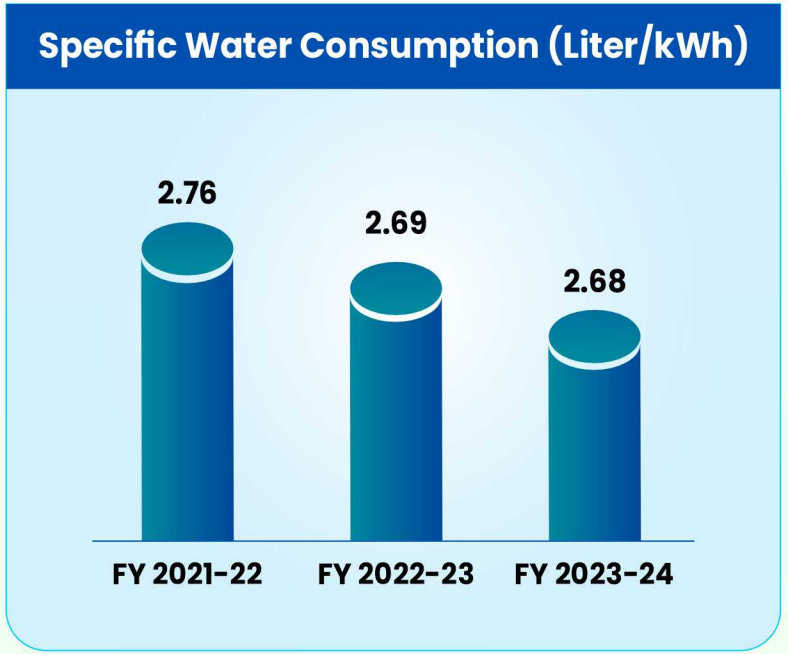
- R&D Efforts
- Air Cooled Condenser (AAC)
- Treatment & Reuse of Sewage Treated Water
- Liquid Waste Treatment Plant (LWTP)
- Ash Water Recirculation System (AWRS)
- Rainwater Harvesting
- Zero Liquid Discharge
- Increasing Cycles of Concentration

% Use of Alternate Water



Reduction in Fresh Water Consumption

NTPC has became signatory of CEO water mandate since 23.03.2021 and commit to continuous progress against six commitment areas of stewardship to manage their own water risks.



Water: Technological Innovations

Air Cooled Condenser (ACC)

- Thermal power plants use large quantities of water for condensation of steam and cooling of auxiliary systems. As per current norms of MOEF&CC, the water requirement for a 2x800 MW plants based on closed cycle cooling system is 4800 m3/hour.
- In water stressed regions, NTPC has been path finder in this regard by adopting Air Cooled Condenser system at North Karanpura (3x660 MW, two units commissioned) and at Patratu (3x800 MW) under commissioning.
- Adoption of air-cooled condenser systems in place of water-cooled condenser system reduces the water requirement to about 40%, i.e. 2000 m3/hour in place of 4800 m^3/hour.
- On annual basis, this translates into a saving of about 21 million cubic meters of water, which can be used for domestic use, irrigation, pisciculture etc.
- NTPC has taken a policy decision to adopt ACC system in all upcoming plants except where technically not feasible.

Air Cooled- Condenser at NTPC North- Karanpura

Air Cooled- Condenser at NTPC Patratu

Fly Ash Utilisation

80,000 MT of ash was Transported through containers on 32 BLC rakes from Khargone. **This is the first time in the country a BLC rake with containers is used for ash Transportation.** This will pave way for increased DFA Utilization.

18.65 LMT ash filling done in Mines.

245.56 LMT Ash supplied for Road Construction Projects

5.17 LMT ash transported through Rail

NTPC stations earned ₹ 280 Crores revenue through sale of ash in year 2024-25 till date.

8 NTPC stations achieved 100 % or more ash utilization in FY24.

Fly Ash Utilisation Cont...

NTPC fulfils 58% of India's Road Project ash requirement while producing just 30% of country's ash*.

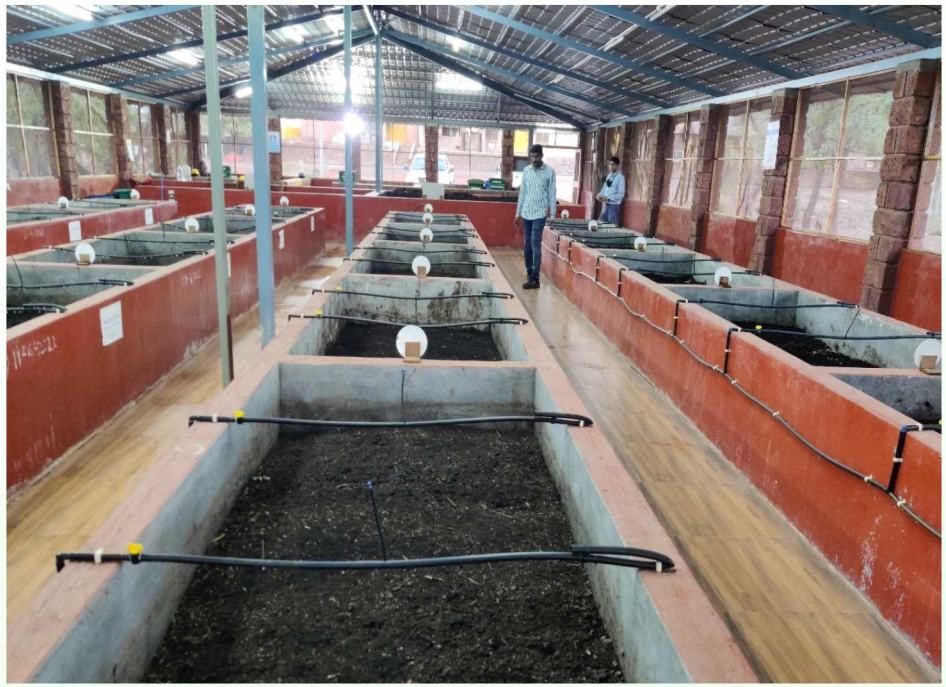
78.88%	NTPC Group	AU* (LMT) FY'24- 406.10 FY'23- 370.36	8 Stns	Ash Utilization (AU) >100%
			280 Crs	Revenue through Ash Sale
76.14%	NTPC Stations	AU* (LMT) FY'24- 349.23 FY'23- 328.22	245.56 LMT	Ash supplied -Road Construction
			143 Rakes	Ash Transportation thru Rail
101.22%	JVs & Subsidiaries	AU* (LMT) FY'24- 56.87 FY'23- 42.14	18.65 LMT	Ash Filling in Mines

** Based on FY23-24 data*

Waste Management in NTPC Premises

Vermi-Compost

Vermicomposting (vermi-compost) is the product of the decomposition process using various species of worms, usually red wigglers, white worms, and other earthworms, to create a mixture of decomposing vegetable or food waste, grass etc.



Nutrition Value of Vermi-compost

Vermi-compost contains 1.25 %, 1.14 % , 1.19 % NPK respectively.

Solid Waste Management Facilities

Integrated Waste Storage Facility

Biogas Plant

Wastewater Management Facilities

ETP Facility

Neutralization Pit at DM Plant

Sewage Treatment Plant

CSSP

Social Performance

5

Sustainable Supply Chain

Supply Chain Conference on Water with major partners e.g. I&T, Ion Exchange, BHEL, IOCL, GE

SSCM Policy

NTPC Sustainable Supply Chain Policy

In pursuit of providing reliable power and related solutions in economical, efficient, environmentally friendly and innovative manner, we at NTPC are committed towards augmenting the supply chain sustainability and reducing negative externalities of business operations. We seek to institute triple bottom line approach in our upstream supply chain and encourage our supply chain partners to follow best environment, social and governance (ESG) practices in their business operations. As a responsible corporate citizen, we incessantly endeavour towards creating synergistic and symbiotic value across our value chain to enhance our social, environmental and economic performance.

We at NTPC are committed towards:

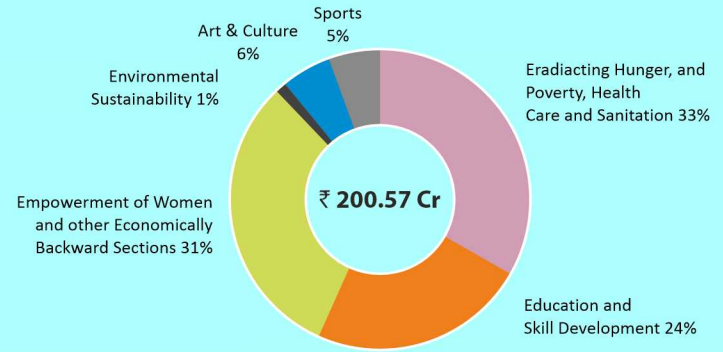
1) Ensuring highest level of compliance to all applicable statutory and legal requirements across the supply chain and procurement practices;
2) Strengthening and maintaining robust health and safety management system in own and supplier managed operations;
3) Embedding transparent, ethical and fair procurement practices and providing equitable opportunity to our vendors;
4) Engaging positively with our suppliers to promote cost effective, resource efficient and environmentally and socially responsible business operations;
5) Fostering partnerships and collaborations with value chain partners to enhance quality and efficiency;
6) Nurturing and reinforcing a conducive work environment; adopting highest standards of human rights and labour practices;
7) Promoting diversity, inclusiveness and equality in workplace across supply chain;

NTPC is committed towards providing necessary governance support and allocating required resources for organization wide implementation of Supply Chain Sustainability Policy.

A periodic review and necessary upgradation of the policy shall be done to enhance the suitability and applicability.

CSR Activities

CSR Expenditure Break-Up



Skill Development and Income Generation

Healthcare Services and Infrastructure

Sports

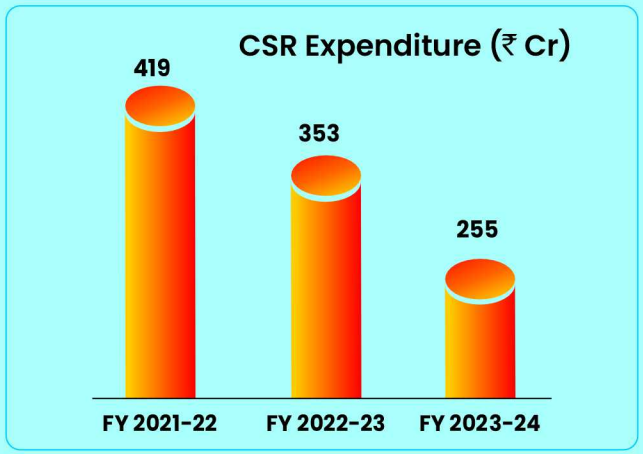
Health, Water and Sanitation

Empower the differently abled and economically weaker sections

Girl Empowerment Mission

Relief during Natural Calamity

Women Empowerment



Key Focus Areas : Safety

NTPC SAFEETY FRAMEWORK

Tools : Implementation

FOCUS ON LEAD INDICATORS

- Pep Talks/TBT
- Capturing Deviations
- Reporting Near Misses
- Daily Random PTW Checking
- Cross- Functional Teams (CFT)

REINFORCING OWNERSHIP

- KOM: SURAKSHA MITRA
- HOD & HOP enhanced involvement
- Routine & Surprise site visit by HODs/ROs
- Swearing-In Ceremony/ Incident Recall
- Zone Leader- Role clarity

STRENGTHENING OF PROCESSES & SYSTEMS

- SURAKSHA App
- SAP Integrated Safety Framework
- OD/OGNs/LMIs
- Safety Dashboards
- HOP Review as per standard Format
- PMS- Safety KPAs
- Accident Examination & Recommendation Compliance System (AERCS)

CAPABILITY DEVELOPMENT

- Employee Training
- Auditor development programme
- Job specific training module (Contractor's Workers)
- SURAKSHAVALI
- ISO 45001 Certification

AUDITS, VISITS & PROMOTIONS

- External Safety Audit through reputed agencies
- Internal Audits
- Surprise Site Visits
- Theme based Safety Observance
- Short films /audio clips
- Safety Pledge & Policy- Acceptance

Safety Policy

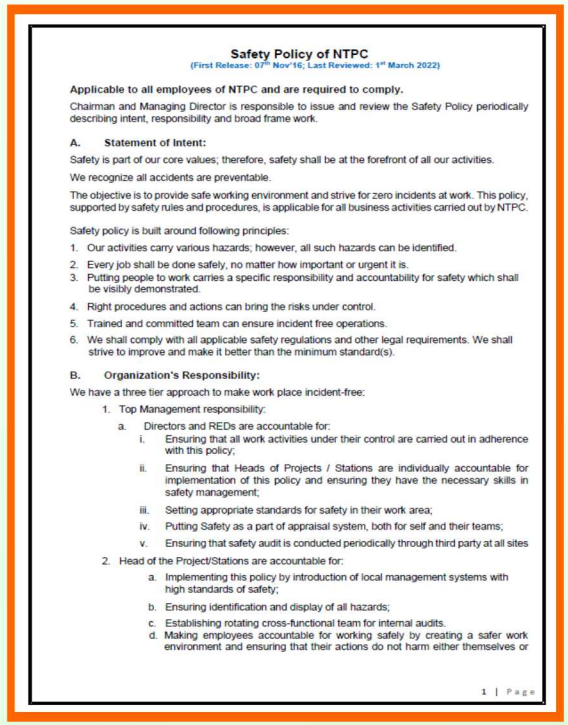
- **All accidents are preventable. Provide safe working environment and strive for zero incidents at work.**
- **Our activities carry various hazards; however, all such hazards can be identified**
- **Every job shall be done safely, no matter how important or urgent it is**
- **Putting people to work carries a specific responsibility & accountability**
- **Right procedure and actions can bring the risks under control**
- **Trained and committed team can ensure incident free operations.**
- **Compliance to applicable safety regulations & legal requirement.**

Business Unit Head (BUH):

- Implementing this policy through LMIs
- Ensuring identification and display of all hazards
- Establishing cross-functional team for internal audits.
- Making employees accountable for working safely

Head of Departments (HODs):

- Identification, reporting & dealing hazards by EICs
- Cordoning of unsafe areas & reporting unsafe conditions by EICs
- Training of workers and awareness about the hazards
- Deployment of relevant safety equipment by the contractor
- Co-operation by all with management and observe rules and procedures.



Safety Policy of NTPC

(First Release: 07th Nov'16; Last Reviewed: 1st March 2022)

Applicable to all employees of NTPC and are required to comply.

Chairman and Managing Director is responsible to issue and review the Safety Policy periodically describing intent, responsibility and broad frame work.

A. Statement of Intent:

Safety is part of our core values; therefore, safety shall be at the forefront of all our activities.

We recognize all accidents are preventable.

The objective is to provide safe working environment and strive for zero incidents at work. This policy, supported by safety rules and procedures, is applicable for all business activities carried out by NTPC.

Safety policy is built around following principles:

1. Our activities carry various hazards; however, all such hazards can be identified.
2. Every job shall be done safely, no matter how important or urgent it is.
3. Putting people to work carries a specific responsibility and accountability for safety which shall be visibly demonstrated.
4. Right procedures and actions can bring the risks under control.
5. Trained and committed team can ensure incident free operations.
6. We shall comply with all applicable safety regulations and other legal requirements. We shall strive to improve and make it better than the minimum standard(s).

B. Organization's Responsibility:

We have a three tier approach to make work place incident-free:

1. Top Management responsibility:
   a. Directors and REDs are accountable for:
      i. Ensuring that all work activities under their control are carried out in adherence with this policy;
      ii. Ensuring that Heads of Projects / Stations are individually accountable for implementation of this policy and ensuring they have the necessary skills in safety management;
      iii. Setting appropriate standards for safety in their work area;
      iv. Putting Safety as a part of appraisal system, both for self and their teams;
      v. Ensuring that safety audit is conducted periodically through third party at all sites
2. Head of the Project/Stations are accountable for:
   a. Implementing this policy by introduction of local management systems with high standards of safety;
   b. Ensuring identification and display of all hazards;
   c. Establishing rotating cross-functional team for internal audits.
   d. Making employees accountable for working safely by creating a safer work environment and ensuring that their actions do not harm either themselves or

1 | Page

Safety Framework Component

Component-1
(Safety Policy & Objectives)

Element-1.1
(Safety Policy, issue, revision & awareness)

Element-1.2
(Management commitment & safety accountability)

Element-1.3
(Appointment of key safety roles)

Element-1.4
(Emergency response planning)

Element-1.5
(Safety objectives & safety plans)

Element-1.6
(Safety documentation)

Component-2
(Safety Risk Management)

Element-2.1
(Hazard identification)

Element-2.2
(Safety risk assessment & mitigation)

Element-2.3
(Incident reporting & investigating)

Element-2.4
(Incident recall)

Component-3
(Safety Assurance)

Element-3.1
(Legal, statutory & other compliances)

Element-3.2
(Safety performance monitoring & measurement)

Element-3.3
(Mitigating health risks: sanitation & personal hygiene amenities)

Element-3.4
(Management of change)

Element-3.5
(Continual improvement)

Element-3.6
(Contractors & contract control)

Component-4
(Safety Promotion)

Element-4.1
(Competencies & training)

Element-4.2
(Safety communication)

Element-4.3
(Safety awareness, rewards & recognition program)

Standard Training Modules

Sl.	Module	Sl.	Module
1	Induction	14	PPE
2	Caught in / Caught by	15	Manual Handling
3	Heavy Vehicle Safety	16	Excavation Safety
4	Work at Height	17	Hazardous Substances
5	Electrical Safety	18	Ergonomics
6	Confined Space	19	General Safety & Hygiene for Office
7	Struck By	20	Demolition
8	Hand Tools	21	Slips and Trips
9	Power Tools	22a	Material Handling
10	Fire Prevention	22b	Material Handling-2
11	Hot Work	23	CHP Housekeeping Workers on General Safety
12	Work on or Near Water		
13	Work Permit System Module		

NTPC Ramagundam

Migratory Birds at NTPC Dadri

Thank You

Website: www.ntpc.co.in